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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,481	10/20/2000	Joel E. Short	42253/	8652

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ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

WANG, LIANG CHE A

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/693,481

Applicant(s)

SHORT ET AL

Examiner

Liang-che Alex Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>5</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____.   |

**DETAILED ACTION**

1. Claims 1-13 have been examined
2. Claims 14-27 are orally withdrawn by election of restriction on the phone on 3/5/2004.

***Paper Submitted***

3. It is hereby acknowledged that the following papers have been received and placed of record in the file:

- a. **Information Disclosure Statements** in paper number 4 as received on 04/30/2001 is considered.

***Election/Restrictions***

4. Restriction to one of the following invention is required under 35 U.S.C. 121:
  - I. Claims 1-13 drawn to network data transfer regulation, classified in class 709, subclass 232.
  - II. Claims 14-27 drawn to prioritized data routing, classified in class 709, subclass 238.
5. Inventions I, II, are related as subcombination disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The following case instants:

Invention II, sets a regulation of limiting a transfer rate of data transmission..

Invention III, determining a priority for transmitting the packet.

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6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
7. Claims 14-27 are orally withdrawn by election of restriction on the phone on 3/5/2004.
8. Claims 14-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group of invention, there being no allowable generic or linking claim. Election was made **without** traverse.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
10. Claims 1-5, 7-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler, US Patent Number 5,793,978, hereinafter Fowler, in views of Jam et al., US Patent Number 5,787,483, hereinafter Jam.
11. Referring to claim 1, Fowler has taught a method for dynamic control of data transfer by a operator during an on-going network session (Col 1 lines 42-56), comprising:
  - a. receiving a data packet at a gateway device (figure 1 node 101 is responsible for receiving and routing the data packets, therefore is viewed as a gateway device);

- b. retrieving a operator selected bandwidth for the data packet (Col 1 lines 53-56, operator may specify a transfer rate and Col 1 lines 46-48, the broadcast queue is limited to the selected amount of communication bandwidth);
- c. determining if the transfer rate should be limited based on the operator selected bandwidth (Col 1 lines 49-52);
- d. limiting a transfer rate for data packet transmission based on the outcome of the determination process (Col 1 lines 46-48).

Fowler has not explicitly taught where the operator is a subscriber.

However, Jam has taught a communication system that is having a plurality of subscribers transferring and receiving data packets (frames) (Figure 1 and Col 5 lines 20-26.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the teaching of Fowler such that to have the operator to be the subscribers, because both Fowler and Jam has taught data packet communication with user sending or receiving data.

A person with ordinary skill in the art would have been motivated to make the modification to Fowler because operator is the person operating the system is know as an user, and a user of the service is usually called the subscriber of the service, having the user to subscribed to the services would allow the system to keep track of the subscriber actions and usage in order to improve the management of users in the system.

12. Referring to claim 2, Fowler as modified has taught receiving a data further comprises receiving a data packet from a subscriber (JAM, figure 1, data packet could be send through 107b from the subscribers 105s via fibre node 107.)
13. Referring to claim 3, Fowler as modified has further taught, identifying the subscriber by the media access control (MAC) address within the data packet (JAM, Col 14 lines 1-2.)
14. Referring to claim 4, Fowler has further taught wherein receiving a data packet further comprises receiving a data packet from a network (Fowler, Figure 1, packet 104 is sent between the network of items 101s.)
15. Referring to claim 5, Fowler as modified has further taught, identifying an intended subscriber recipient by the media access control (MAC) address within the data packet (Col 14 lines 1-2.)
16. Referring to claim 7, Fowler as modified has further taught wherein retrieving a subscriber selected bandwidth further comprises retrieving a subscriber selected bandwidth (Col 1 lines 52-54, operator selects bandwidth) for information being sent to a network and an independent subscriber selected bandwidth for information retrieved from a network (Col 1 lines 46-48.)
17. Referring to claim 8, Fowler as modified has taught wherein determining if the transfer rate for data packet transmission should be limited further comprises determining a delay period, if any, for transmitting the packet and wherein limiting a transfer rate for data packet transmission further comprises queuing the data packet for the delay period before transmitting the packet (Fowler, Col 1 lines 49-52, delay period is determined as the the

period of time that message is held until the selected amount of bandwidth become available.)

18. Referring to claim 9, Fowler as modified has further taught wherein determining a delay period further comprises determining a delay period based upon the byte size of the data packet (Fowler, Col 53-56, selected bandwidth is based on the packet bytes to be send in any one second period.)
19. Referring to claim 10, Fowler as modified has further taught wherein determining a delay period further comprises determining a delay period based upon the byte size and the time lapse of the most recently transmitted data packet that was associated with the subscriber (Fowler, Col 53-56, selected bandwidth is based on the packet bytes to be send in any one second period.)
20. Referring to claim 11, Fowler has taught about the delay period (Col 1 lines 48-52.) And it would have been obvious for a person with ordinary skill in the art to have the maximum delay period of 2 seconds, because a delay time could be set to a limit of any time interval including a maximum of 2 seconds.
21. Referring to claim 13, Fowler as modified has taught wherein the subscriber network session is a wireless network session (Fowler, Col 2 lines 63-67, broadcasting is known to be done either wirely or wirelessly.)
22. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler, US Patent Number 5,793,978, hereinafter Fowler, in views of Jam et al., US Patent Number 5,787,483, hereinafter Jam, in further view of Salkewicz, US Patent Number 6,609,153, hereinafter Salkewicz. Fowler in view of Jam has taught an invention as described in

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claim 1, including retrieving a subscriber selected bandwidth. Fowler as modified has not taught where the information is retrieved from the Authentication, Authorization and Accounting (AAA) subscriber management interface.

However, Salkewicz has taught the use of AAA to retrieve access control and identify the subscribers (Col 15 lines 13-27.)

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the teaching of Fowler in view of Jam such that to have information retrieved from an AAA subscriber management interface, because both Fowler as modified and Salkewicz has taught packet communication with network devices.

A person with ordinary skill in the art would have been motivated to make the modification to Fowler because having an AAA would allow a better security to be implemented in Fowler's system though the Authentication, Authorization and Accounting.

23. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler, US Patent Number 5,793,978, hereinafter Fowler, in views of Jam et al., US Patent Number 5,787,483, hereinafter Jam, in further view of Barton, US Patent Number 6,310,886, hereinafter Barton. Fowler as modified has not taught, queuing the data packet using a ring buffer. However, Barton has taught the use of ring buffer for queuing the data packet (Col 8 lines 1-3).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the teaching of Fowler in view of Jam such that to have a

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ring buffer for queuing the data packet, because both Fowler as modified and Barton has taught packet communication in a network environment.

A person with ordinary skill in the art would have been motivated to make the modification to Fowler because having the ring buffer algorithm used for queuing packets to be sent through is well known and recognized by the practitioners skilled in the art as taught by Barton (Col 7 line 67- Col 8 line 3.)

### ***Conclusion***

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must show how the amendments avoid such references and objections. See 37 CFR 1.111(c).
25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (703) 305-3391. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.
26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on (703)308-6662. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications.

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27. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Liang-che Alex Wang *lw*  
March 9, 2004

*Hosain Alam*  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**